

In the Claims

For the convenience of the Examiner, all pending claims are set forth below, whether or not an amendment is made. Please amend the claims as follows:

1. (Currently Amended) A method for providing a multicast service, comprising:
maintaining multicast service information at an application server, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source;
determining a cell supporting a user device associated with the subscriber;
initiating creation of a bearer path for the multicast service; and
directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile distinct from a base station.

2. (Original) The method of Claim 1, wherein initiating creation of the bearer path for the multicast service further comprises:
determining an enabler mobile corresponding to the cell supporting the user device;
and
instructing the enabler mobile to initiate creation of a radio access bearer.

3. (Original) The method of Claim 1, further comprising communicating one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content.

4. (Original) The method of Claim 1, further comprising establishing a multicast service level of the multicast service in accordance with the cell supporting the user device.

5. (Original) The method of Claim 1, further comprising performing a power control operation by:
determining a signal power;
calculating power control information from the signal power; and
initiating adjustment of the signal power according to the power control information.

6. (Currently Amended) A server for providing a multicast service, comprising:
a memory operable to store multicast service information, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source; and
one or more processors coupled to the memory and operable to:
determine a cell supporting a user device associated with the subscriber;
initiate creation of a bearer path for the multicast service; and
directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile distinct from a base station.

7. (Original) The server of Claim 6, wherein the one or more processors are operable to initiate creation of the bearer path for the multicast service by:
determining an enabler mobile corresponding to the cell supporting the user device;
and
instructing the enabler mobile to initiate creation of a radio access bearer.

8. (Original) The server of Claim 6, wherein the one or more processors are further operable to communicate one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content.

9. (Original) The server of Claim 6, wherein the one or more processors are further operable to establish a multicast service level of the multicast service in accordance with the cell supporting the user device.

10. (Original) The server of Claim 6, wherein the one or more processors are further operable to perform a power control operation by:
determining a signal power;
calculating power control information from the signal power; and
initiating adjustment of the signal power according to the power control information.

11. (Currently Amended) Logic for providing a multicast service, the logic embodied in a on at least one computer readable medium and operable to:

maintain multicast service information at an application server, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source;

determine a cell supporting a user device associated with the subscriber;

initiate creation of a bearer path for the multicast service; and

directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell, the enabler mobile distinct from a base station.

12. (Original) The logic of Claim 11, operable to initiate creation of the bearer path for the multicast service by:

determining an enabler mobile corresponding to the cell supporting the user device;

and

instructing the enabler mobile to initiate creation of a radio access bearer.

13. (Original) The logic of Claim 11, further operable to communicate one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content.

14. (Original) The logic of Claim 11, further operable to establish a multicast service level of the multicast service in accordance with the cell supporting the user device.

15. (Original) The logic of Claim 11, further operable to perform a power control operation by:

determining a signal power;

calculating power control information from the signal power; and

initiating adjustment of the signal power according to the power control information.

16. (Currently Amended) A method for providing a multicast service, comprising:
receiving at an enabler device an instruction to create a radio access bearer for a multicast service, the multicast service operable to deliver multicast content from a multicast source, the enabler device assigned to a cell supporting a user device;
creating the radio access bearer for the multicast service in response to the instruction;
opening a Packet Data Protocol context for the radio access bearer; and
directing the enabler device to facilitate delivery of the multicast content to the user device using the radio access bearer, the enabler device located in the cell, the enabler device distinct from a base station.

17. (Original) The method of Claim 16, further comprising communicating one or more parameters associated with the radio access bearer to an application server.

18. (Currently Amended) An enabler device for providing a multicast service, comprising:
an interface operable to receive an instruction to create a radio access bearer for a multicast service, the multicast service operable to deliver multicast content from a multicast source, the enabler device located in a cell supporting a user device, the enabler device distinct from a base station; and

one or more processors coupled to the interface and operable to:
create the radio access bearer for the multicast service in response to the instruction;
open a Packet Data Protocol context for the radio access bearer; and
enable delivery of the multicast content to the user device using the radio access bearer.

19. (Original) The enabler device of Claim 18, the one or more processors further operable to communicate one or more parameters associated with the radio access bearer to an application server.

20. (Currently Amended) Logic for providing a multicast service, the logic embodied in ~~a~~ on at least one computer readable medium and operable to:

receive at an enabler device an instruction to create a radio access bearer for a multicast service, the multicast service operable to deliver multicast content from a multicast source, the enabler device assigned to a cell supporting a user device;

create the radio access bearer for the multicast service in response to the instruction;

open a Packet Data Protocol context for the radio access bearer; and

direct the enabler device to facilitate delivery of the multicast content to the user device using the radio access bearer, the enabler device located in the cell, the enabler device distinct from a base station.

21. (Original) The logic of Claim 20, further operable to communicate one or more parameters associated with the radio access bearer to an application server.

22. (Currently Amended) A method for providing a multicast service, comprising:
activating at a multicast gateway support node a Packet Data Protocol context for a multicast service, the multicast service facilitated by a plurality of enabler mobiles located in one or more cells, the plurality of enabler mobiles operable to deliver multicast content from a multicast source, each enabler mobile of the plurality of enabler mobiles distinct from a base station;

receiving an instruction to join a multicast tree for the multicast service; and

joining the multicast tree in response to the instruction.

23. (Previously Presented) The method of Claim 22, further comprising:
receiving the multicast content communicated using a plurality of data packets; and
duplicating the data packets to create duplicated data packets for each enabler mobile of the plurality of enabler mobiles.

24. (Currently Amended) A node for providing a multicast service, comprising:
an interface operable to:

receive an instruction to activate a Packet Data Protocol context for a multicast service, the multicast service facilitated by a plurality of enabler mobiles located in one or more cells, the plurality of enabler mobiles operable to deliver multicast content from a multicast source, each enabler mobile of the plurality of enabler mobiles distinct from a base station; and

receive an instruction to join a multicast tree for the multicast service; and
one or more processors coupled to the interface and operable to:
activate the Packet Data Protocol in response to the instruction to activate the Packet Data Protocol context; and
join the multicast tree in response to the instruction to join the multicast tree.

25. (Currently Amended) The node of Claim 24, wherein:
the interface is operable to receive the multicast content communicated using a plurality of data packets; and
the one or more processors are ~~processor~~ is operable to duplicate the data packets to create duplicated data packets for each enabler mobile of the plurality of enabler mobiles.

26. (Currently Amended) Logic for providing a multicast service, the logic embodied in ~~a~~ on at least one computer readable medium and operable to:
activate at a multicast gateway support node a Packet Data Protocol context for a multicast service, the multicast service facilitated by a plurality of enabler mobiles located in one or more cells, the plurality of enabler mobiles operable to deliver multicast content from a multicast source, each enabler mobile of the plurality of enabler mobiles distinct from a base station;
receive an instruction to join a multicast tree for the multicast service; and
join the multicast tree in response to the instruction.

27. (Previously Presented) The logic of Claim 26, further operable to:
receive the multicast content communicated using a plurality of data packets; and
duplicate the data packets to create duplicated data packets for each enabler mobile of
the plurality of enabler mobiles.

28. (Currently Amended) A method for providing a multicast service, comprising:
maintaining multicast service information at an application server, the multicast
service information describing a multicast service having an associated subscriber, the
multicast service operable to deliver multicast content from a multicast source;

initiating creation of a bearer path for the multicast service by communicating an
instruction from the application server to an enabler device, the instruction for creating a
radio access bearer for the multicast service, the enabler device associated with a cell
supporting a user device associated with the subscriber; and

directing a plurality of enabler mobiles to facilitate delivery of the multicast content
to the user device using the bearer path, the plurality of enabler mobiles located in one or
more cells, each enabler mobile of the plurality of enabler mobiles distinct from a base
station.

29. (Previously Presented) The method of Claim 28, wherein directing a plurality
of enabler mobiles to facilitate delivery of the multicast content to the user device using the
bearer path, the plurality of enabler mobiles located in one or more cells further comprises:

activating at a multicast gateway support node a Packet Data Protocol context for the
multicast service; and

joining the multicast gateway support node to a multicast tree for the multicast
service.

30. (Original) The method of Claim 28, further comprising communicating one or
more parameters associated with the bearer path to the user device, the user device operable
to use the parameters to receive the multicast content.

31. (Original) The method of Claim 28, further comprising establishing a multicast service level of the multicast service in accordance with, at least one of the cell supporting the user device and a subscription of the subscriber.

32. (Previously Presented) The method of Claim 28, further comprising:
receiving at a multicast gateway support node the multicast content communicated using a plurality of data packets; and
duplicating the data packets to create duplicated data packets for each enabler mobile of the plurality of enabler mobiles.

33. (Currently Amended) A system for providing a multicast service, comprising:
an application server operable to:
maintain multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source; and
initiate creation of a bearer path for the multicast service by communicating an instruction for creating a radio access bearer for the multicast service; and
an enabler device associated with a cell supporting a user device associated with the subscriber, the enabler device distinct from a base station, the enabler device located in the cell and operable to:
receive the instruction for creating the radio access bearer for the multicast service;
create the radio access bearer in response to the instruction; and
enable delivery of the multicast content to the user device using the bearer path.

34. (Original) The system of Claim 33, further comprising a multicast gateway support node operable to:
activate a Packet Data Protocol context for the multicast service; and
join the multicast gateway support node to a multicast tree for the multicast service.

35. (Original) The system of Claim 33, the application server further operable to communicate one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content.

36. (Original) The system of Claim 33, the application server further operable to establish a multicast service level of the multicast service in accordance with at least one of the cell supporting the user device and a subscription of the subscriber.

37. (Original) The system of Claim 33, further comprising a multicast gateway support node operable to:

receive the multicast content communicated using a plurality of data packets; and
duplicate the data packets to create duplicated data packets for each enabler mobile of a plurality of enabler mobiles.

38. (Currently Amended) Logic for providing a multicast service, the logic embodied in a medium and operable to:

maintain multicast service information at an application server, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source;

initiate creation of a bearer path for the multicast service by communicating an instruction from the application server to an enabler device, the instruction for creating a radio access bearer for the multicast service, the enabler device located in a cell supporting a user device associated with the subscriber, the enabler device distinct from a base station;
and

enable delivery of the multicast content to the user device using the bearer path.

39. (Original) The logic of Claim 38, operable to enable delivery of the multicast content to the user device using the bearer path by:

activating at a multicast gateway support node a Packet Data Protocol context for the multicast service; and

joining the multicast gateway support node to a multicast tree for the multicast service.

40. (Original) The logic of Claim 38, further operable to communicate one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content.

41. (Original) The logic of Claim 38, further operable to establish a multicast service level of the multicast service in accordance with at least one of the cell supporting the user device and a subscription of the subscriber.

42. (Original) The logic of Claim 38, further operable to:
receive at a multicast gateway support node the multicast content communicated using a plurality of data packets; and
duplicate the data packets to create duplicated data packets for each enabler mobile of a plurality of enabler mobiles.

43. (Currently Amended) A system for providing a multicast service, comprising:
means for maintaining multicast service information at an application server, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source;
means for initiating creation of a bearer path for the multicast service by communicating an instruction from the application server to an enabler device, the instruction for creating a radio access bearer for the multicast service, the enabler device located in a cell supporting a user device associated with the subscriber, the enabler device distinct from a base station; and
means for enabling delivery of the multicast content to the user device using the bearer path.

44. (Currently Amended) A method for providing a multicast service, comprising:
maintaining multicast service information at an application server, the multicast service information describing a multicast service having an associated subscriber, the multicast service operable to deliver multicast content from a multicast source;

establishing a multicast service level of the multicast service in accordance with a cell supporting a user device of a plurality of user devices, the user device associated with the subscriber;

initiating creation of a bearer path for the multicast service by communicating an instruction from the application server to an enabler device of a plurality of enabler devices, the instruction for creating a radio access bearer for the multicast service, the enabler device located in the cell supporting the user device associated with the subscriber, the enabler device distinct from a base station;

enabling delivery of the multicast content to the user device using the bearer path by:

activating at a multicast gateway support node a Packet Data Protocol context for the multicast service; and

joining the multicast gateway support node to a multicast tree for the multicast service;

communicating one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content;

receiving at the multicast gateway support node the multicast content communicated using a plurality of data packets; and

duplicating the data packets to create duplicated data packets for each enabler ~~mobile device~~ of a the plurality of enabler mobiles devices, ~~the plurality of user devices comprising the user device associated with the subscriber.~~